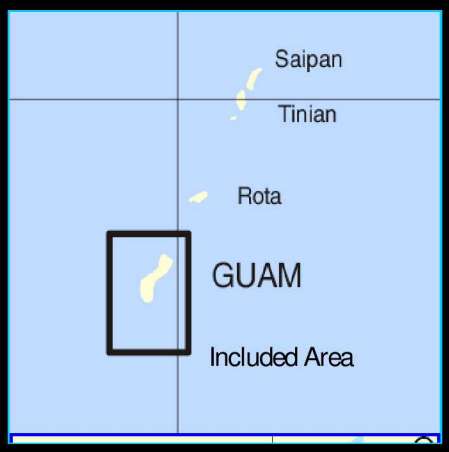
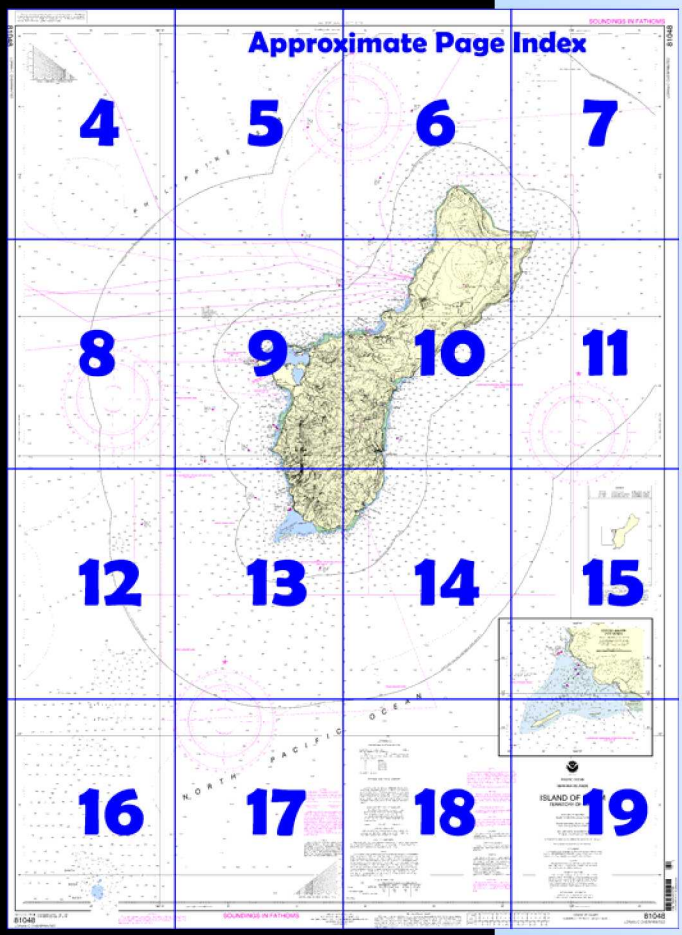
BookletChart™

Mariana Islands – Island of Guam

(NOAA Chart 81048)





A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

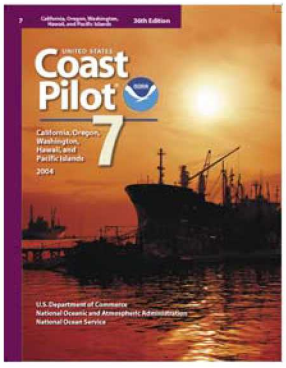
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 15 excerpts]

(11) Mariana Islands are comprised of the **Northern Marianas** and **Guam**. The Northern Marianas, a self-governing U. S. commonwealth consists of a chain of 16 volcanic islands, which extend in a N and S direction for a distance of about 450 miles. The islands in the group from N to S are Farallon de Pajaros, Maug, Asuncion, Agrihan, Pagan, Alamagan, Guguan, Sarigan, Anatahan, Farallon de Medinilla, Saipan, Tinian, Aguijan, and Rota. Except for Maug, which is a cluster of three tiny islands, all are single islands which rise precipitously as mountain peaks of rocky, volcanic material and are conspicuous from the offing. They are a good radar target from a distance of 14 miles, but are reported to give a poor return from a distance of 28 miles. Their total area is approximately 184 square miles. The three principal islands, Saipan (47 square miles), Tinian (39 square miles) and Rota (32 square miles) form two-thirds of the land area of the group.

(12) **Guam**, a U.S. territory since 1898, is not included in the Northern Marianas. Guam is the largest and most southern island of the Marianas Archipelago. The island is about 30 miles long and varies from 4 to 8 miles in width.

Weather, Pacific Islands

(13) The islands of the Marianas Archipelago have similar weather conditions. Under ordinary circumstances, the wind and seas in the vicinity of Guam are easterly due to the Northeast Trades. Westerly winds are at times experienced during the summer months as Guam is barely within the limits of the Southwest Monsoon. These winds are light as a rule. In the vicinity of Guam, northeasterly and east-northeasterly winds prevail for 6 months of the year. These winds blow from the northeast to east 65% of the time between December and May, and are strongest during these months. Between June and November, the surface winds are quite variable; calms are rare. In the southerly islands, the winds show a slight southerly trend as early as May.

(14) In the vicinity of the islands of Saipan and Tinian, the steadiest winds occur when the winter monsoon and the NE Trades reinforce each other. Between November and April, NE and easterly winds prevail 70% of the time at rates of 10 to 12 knots. During the summer monsoon (May to October) easterly winds predominate, but southerly to westerly winds also occur. Wind velocities are about 10 to 11 knots from May to July, and 8 knots from August to October. Land mass effect modifies the maritime diurnal variations so that the surface winds are strongest at 0300 and weakest at 1400.

(15) In the vicinity of Pagan Island, the winds are steadiest during the Northeast Monsoon (November through March). They blow mostly from the NE at an average rate of 15 knots. From April through June, the monsoon weakens and the prevailing winds become more easterly. During the wet season (June through November), easterly winds continue to predominate, but with considerable percentages from southerly to westerly directions. The winds are mostly light; the only strong winds occurring with typhoons.

(16) Precipitation increases decidedly during the summer months, especially in the southern islands. The wet season (July through October) has a mean monthly average of 10 inches (254 mm) or more. The major rainfall consists of heavy showers. As a rule, the rainfall diminishes as the latitude increases.

(17) The rainy season at Guam is from the first of July until the early part of November, with a monthly average of 11 to 15 inches (279 to 381 mm). January through June is the driest period, with an average monthly fall of 3.9 to 6.5 inches (99 to 165 mm). March is the driest month with an average precipitation amount of 3.9 inches (99 mm). The mean average rainfall is about 101 inches annually (2565 mm) but has ranged from 165 inches (4191 mm) in 1976 to 67 inches (1702 mm) in 1973. An average of 30 thunderstorms each year effect the island of Guam. The most active month is August.

Table of Selected Chart Notes

NOTE C

All buoys in Merizo Channel are privately maintained.

Corrected through NM Feb. 11/06
Corrected through LNM Jan. 24/06

Mercator Projection
Scale 1:100,000 at Lat 13°22'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List, U.S. Coast Pilot, and NGA Publication 126 for details.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

NOTE B

Boundary limits of Submerged Submarine Operating Areas are shown by a solid magenta line. As submarines may be submerged in these areas, vessels should proceed with caution.

For Symbols and Abbreviations see Chart No. 1

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Guam	WXM-85	162.40 MHz

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 and NGA Publication 126 for supplemental information.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

HORIZONTAL DATUM

The horizontal reference datum of this chart is World Geodetic System 1984 (WGS 84), which for charting purposes is considered equivalent to the North American Datum of 1983 (NAD 83). Geographic positions referred to the Guam 1963 Datum must be corrected an average of 5.274" northward and 8.635" eastward to agree with this chart.

HEIGHTS

Elevations of rocks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9970.....99,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 9970-W

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Information Agency or others should not be used with his chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely soley on the lattices in inshore waters.

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

NOTE X

The 12 nautical mile territorial sea was established by Presidential Proclamation 5928, December 27, 1988, and is also the outer limit of the U.S. contiguous zone for the application of domestic law. The 3 nautical mile line, previously identified as the outer limit of the territorial sea, is retained because the proclamation states that it does not alter existing State or Federal law. The 9 nautical mile natural resources boundary off Texas, the Gulf coast of Florida, and Puerto Rico, and the 3 nautical mile line elsewhere remain the inner boundary of the Federal fisheries jurisdiction and limit of states' jurisdiction under the Submerged Lands Act (P.L. 83-31; 67 Stat. 29, March 22, 1953). These maritime limits are subject to modification, as represented on future charts. The lines shown on the most recent chart edition take precedence.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

TIDAL INFORMATION

Place Name (LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
	feet	feet	feet	feet
Apra Harbor, Guam (13°26'N / 144°39'E)	2.4	2.2	0.6	--.--

(Nov 2003)

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

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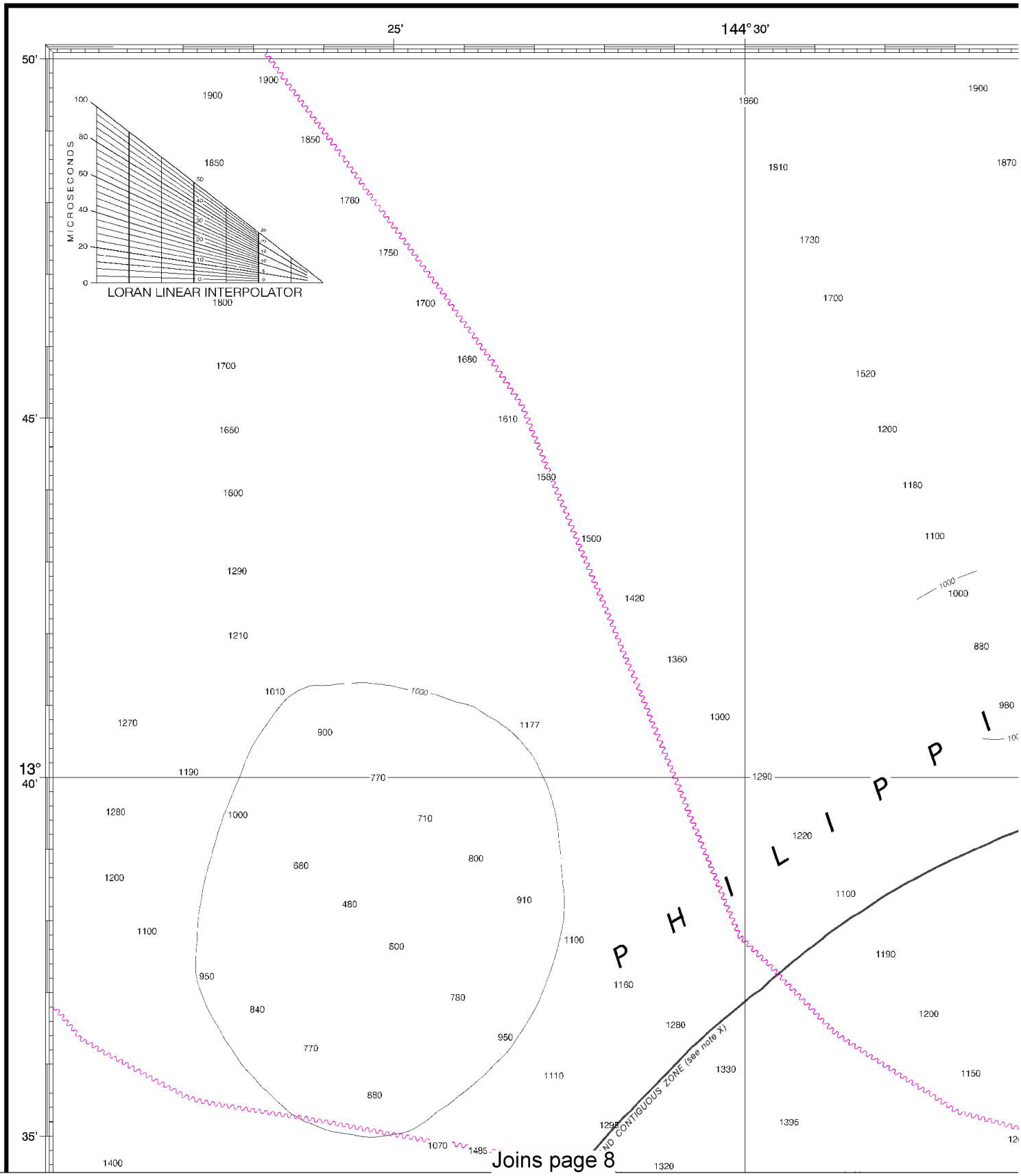
81048

LORAN-C OVERPRINTED



4

North

Printed at reduced scale.

SCALE 1:100,000

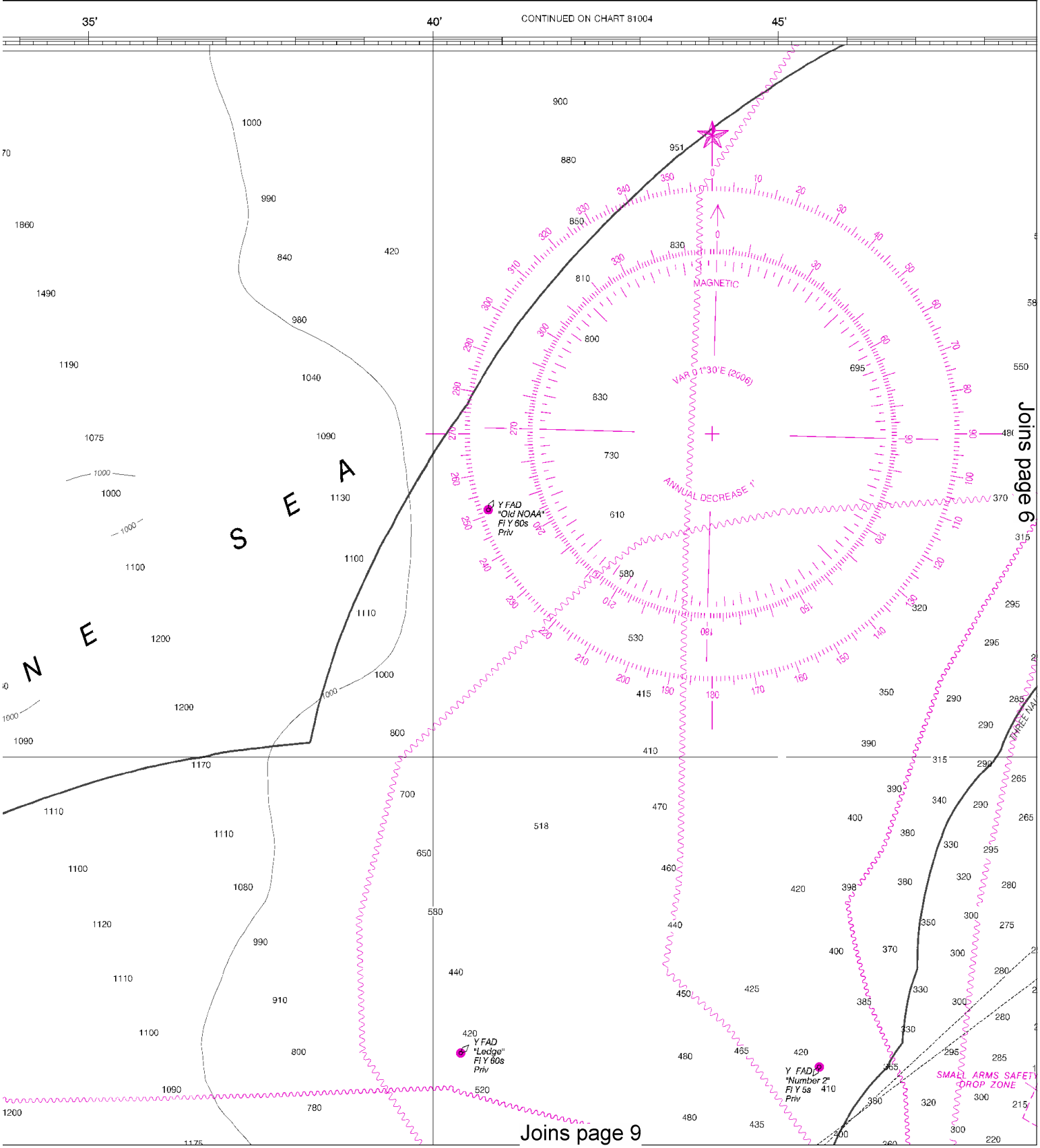
Nautical Miles

1 0 1 2 3 4 5 6 7 8 9

Yards

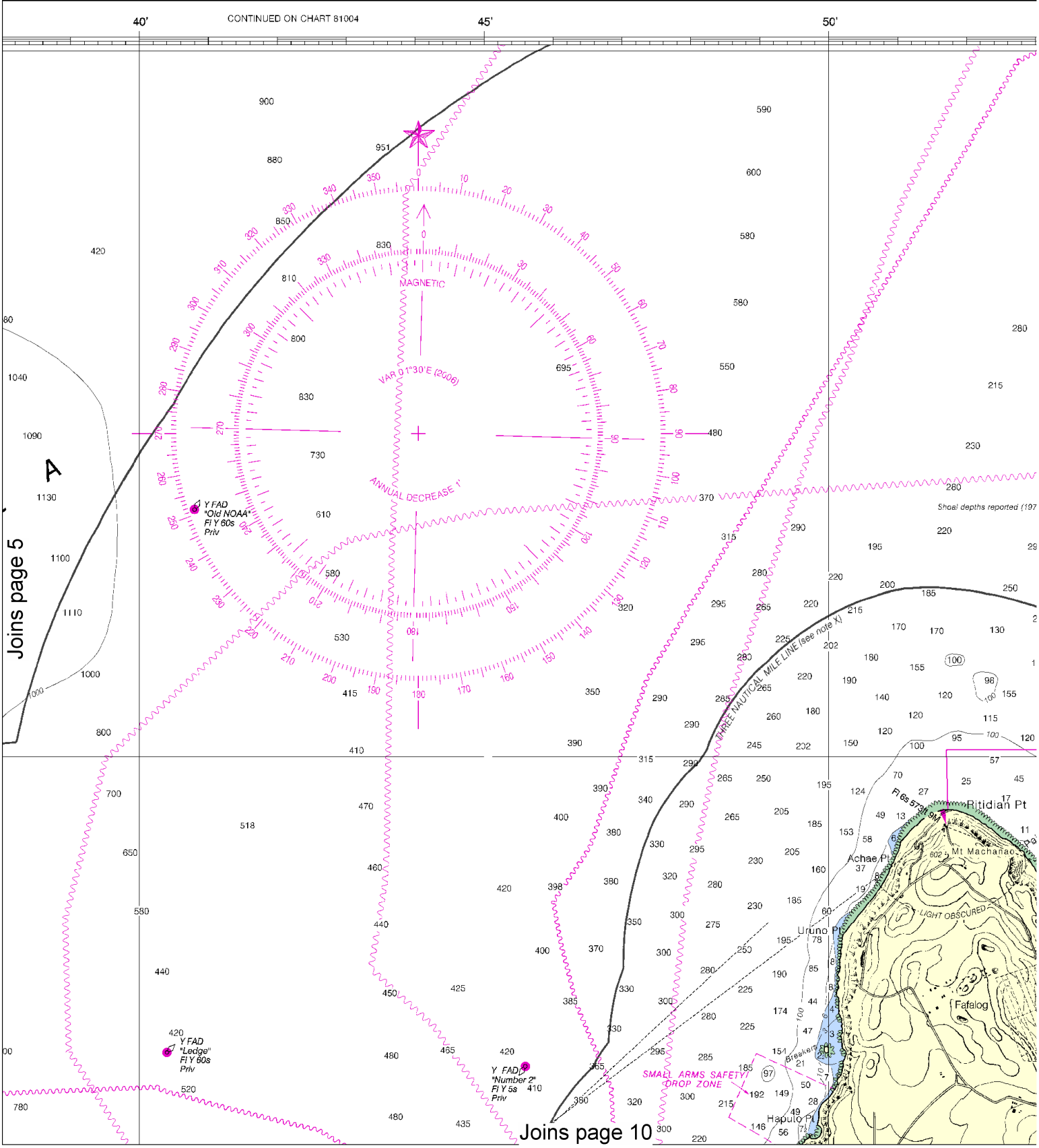
2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:133333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

Formerly C&GS 4196, 1st Ed., May 1948 H-1948-716 KAPP 2828



North

Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles

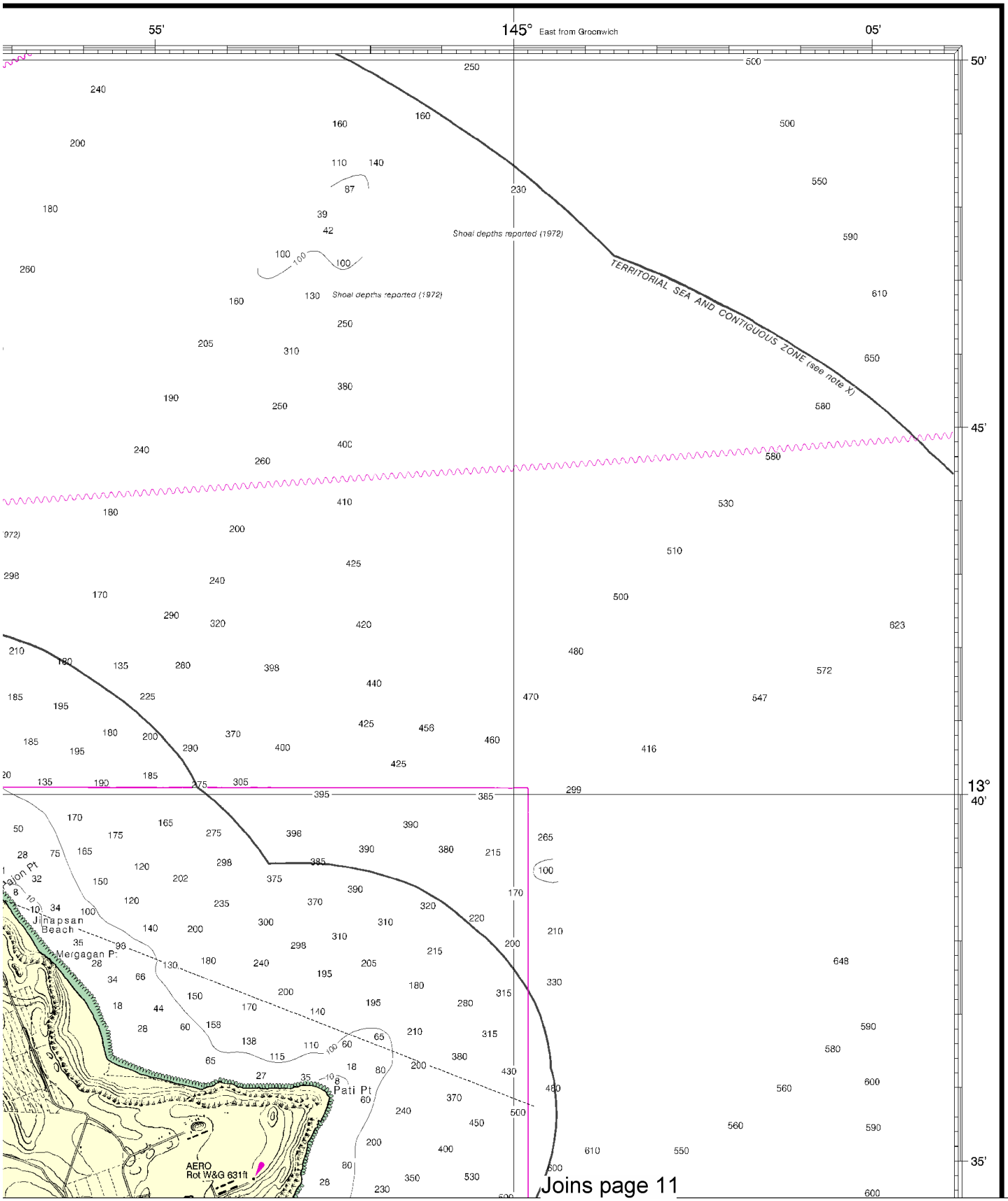
1 0 1 2 3 4 5 6 7 8 9

Yards

2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.

SOUNDINGS IN FATHOMS

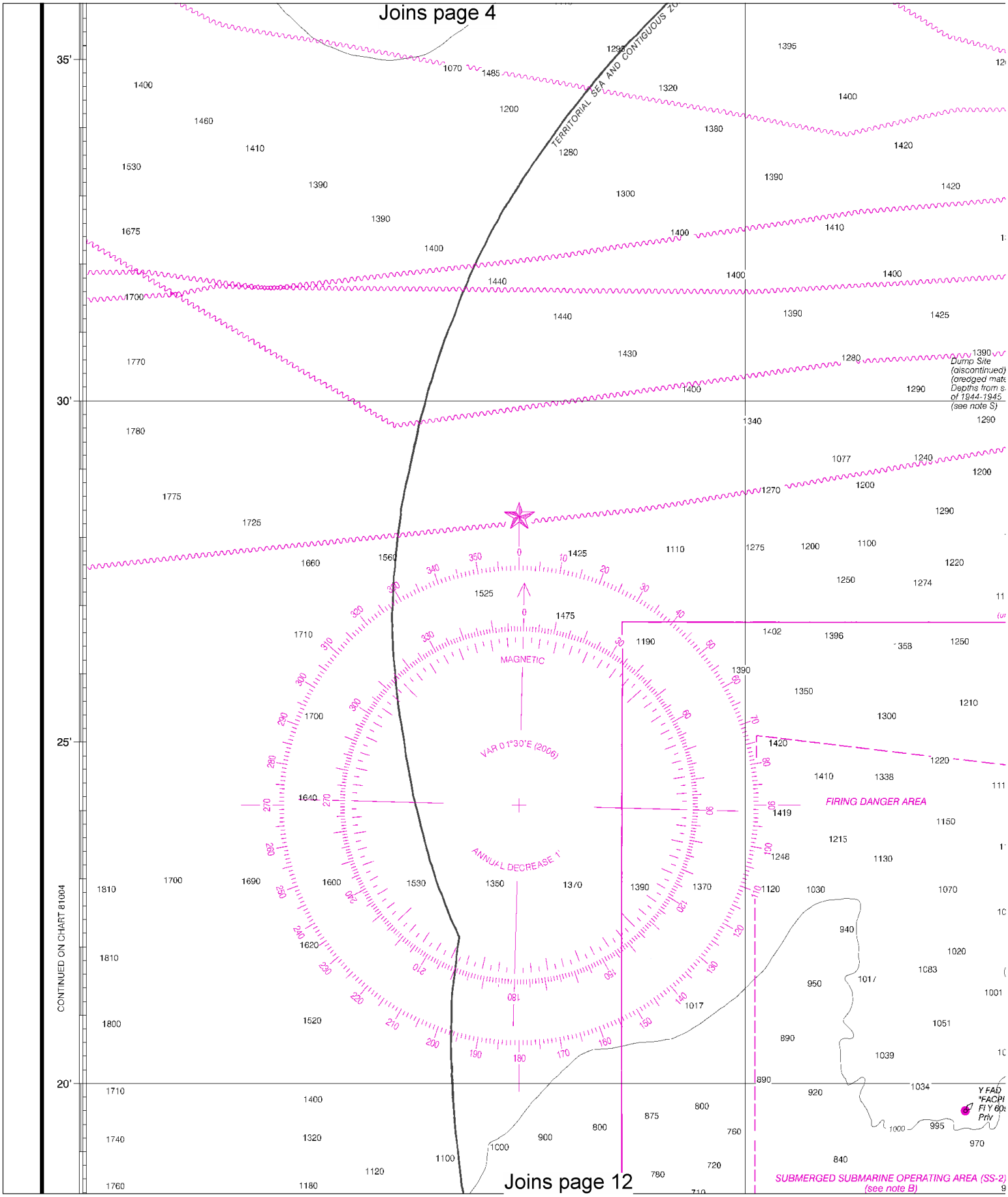


Joins page 11

81048

LORAN-C OVERPRINTED

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
NGA Weekly Notice to Mariners: 0910 2/27/2010,
Canadian Coast Guard Notice to Mariners: n/a .



8

North

Printed at reduced scale.

~~SCALE 1:100,000~~

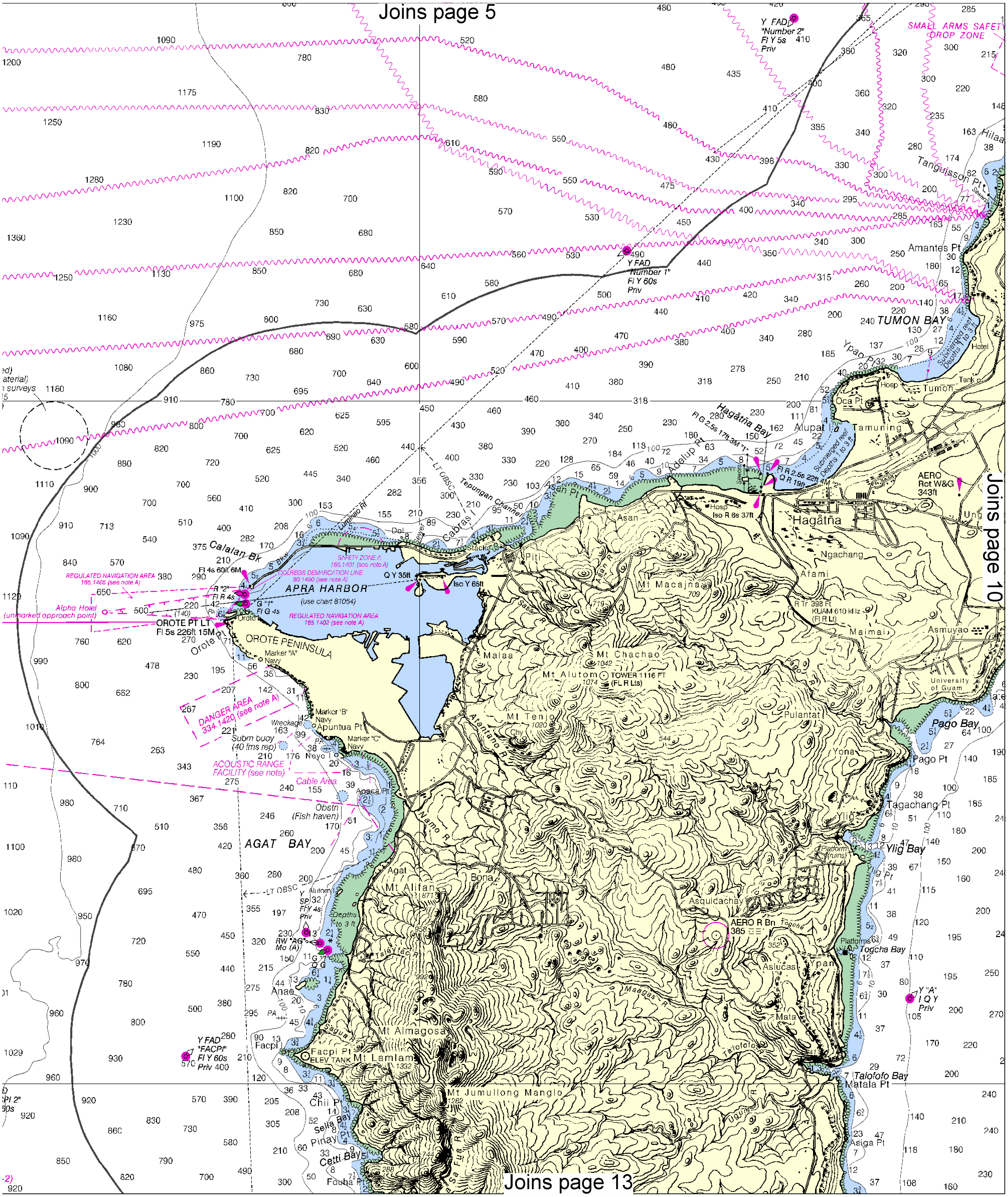
Nautical Miles

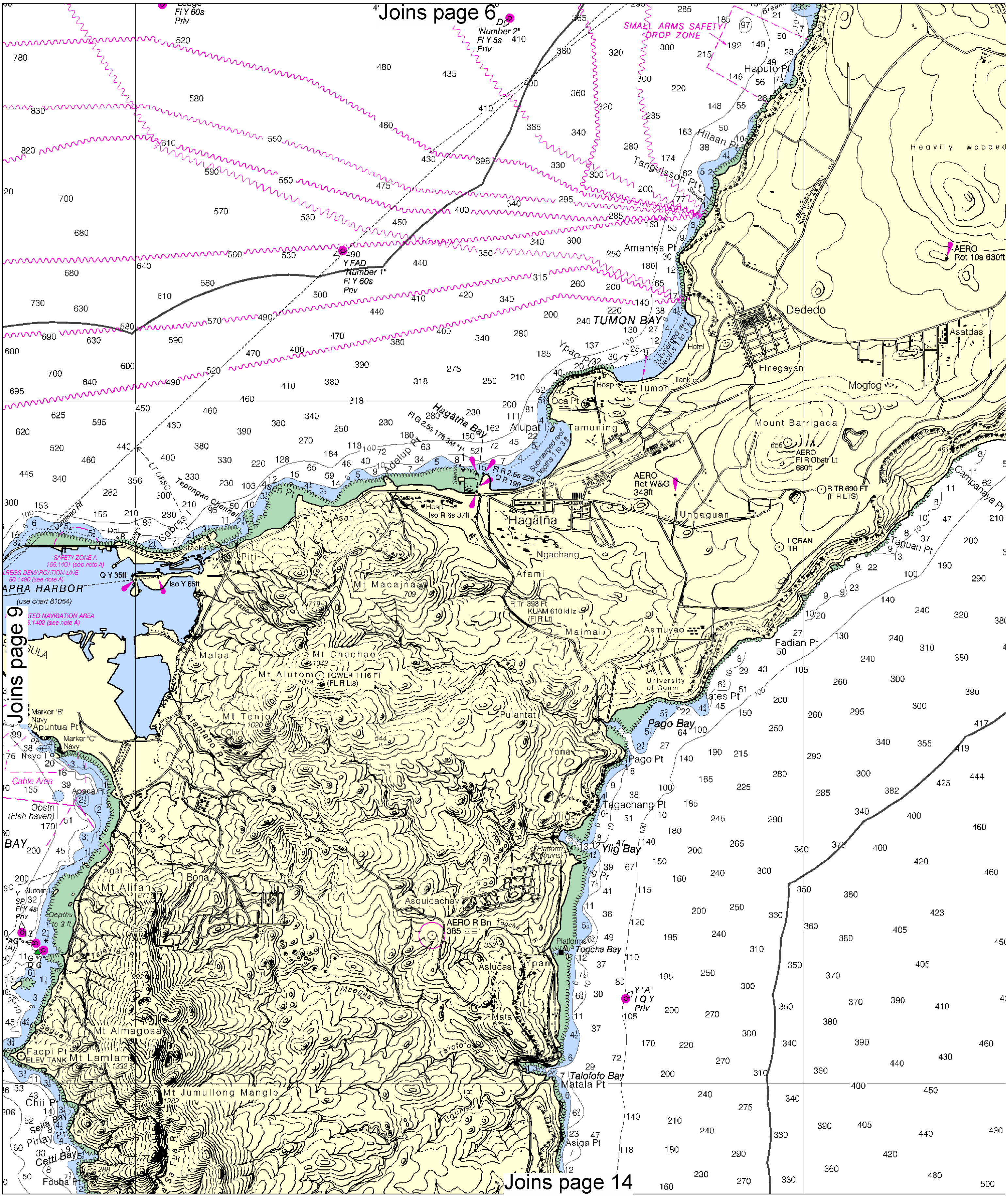
1 0 1 2 3 4 5 6 7 8 9

Yards

2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.


Joins page 5
Joins page 10
Joins page 13
SMALL ARMS SAFETY DROP ZONE
Y FAD "Number 2" Fl Y 5s Priv
Y FAD "Number 1" Fl Y 60s Priv
Tanguisson Pt
Amantes Pt
TUMON BAY
Ypao Pt
Tumon
Hotel
Hosp
Oca Pt
Alupat I
Tamuning
Hagåtña Bay
Adelup Pt
Fl G 2.5s 17ft 3M "1"
Fl R 2.5s 22ft 4M "2"
Q R 19ft
AERO Rot W&G 343ft
Hagåtña
Iso R 6s 37ft
Asan
Asan Pt
Tepungan Channel
Cabras I
Luminao Rf
Calalan Bk
Piti
Stack
APRA HARBOR
(use chart 81054)
SAFETY ZONE A 165.1401 (see note A)
COLREGS DEMARCATION LINE 80.1490 (see note A)
REGULATED NAVIGATION AREA 165.1402 (see note A)
REGULATED NAVIGATION AREA 165.1405 (see note A)
Q Y 35ft
Iso Y 65ft
Fl 4s 60ft 6M
R "2" Fl R 4s
G "1" Fl G 4s
Alpha Hotel (unmarked approach point)
OROTE PT LT Fl 5s 226ft 15M
Orote Pt
OROTE PENINSULA
Marker "A" Navy
Marker "B" Navy
Marker "C" Navy
Apuntua Pt
Wreckage
Subm buoy (40 fms rep)
DANGER AREA 334.1420 (see note A)
ACOUSTIC RANGE FACILITY (see note)
Cable Area
Obstn (Fish haven)
AGAT BAY
Neye I
Apaca Pt
LT OBSC
Y SP Fl Y 4s Priv
RW "AG" Mo (A)
Q G
Depths to 3 ft
Agat
Mt Alifan
Bona
Anae I
Facpi
Facpi Pt
ELEV TANK
Mt Lamlam
Mt Almagosa
Y FAD "FACPI" Fl Y 60s Priv
Chii Pt
Sella Bay
Pinay Pt
Cetti Bay
Fouha Pt
Mt Jumullong Manglo
Mt Macajna
Ngachang
Afami
R Tr 398 Ft KUAM 610 kHz (F R Lt)
Maimai
Asmuyao
Mt Chachao
Mt Alutom
TOWER 1116 FT (FL R Lts)
Mt Tenjo
Malaa
University of Guam
Pulantat
Pago Bay
Pago Pt
Yona
Tagachang Pt
Ylig
Ylig Bay
Ylig Pt
Asquidachay
AERO R Bn 385
Togcha Bay
Platforms
Aslucas
Ypan
Mata
Y "A" I Q Y Priv
Talofofo Bay
Matala Pt
Asiga Pt



10

North

Printed at reduced scale.

SCALE 1:100,000

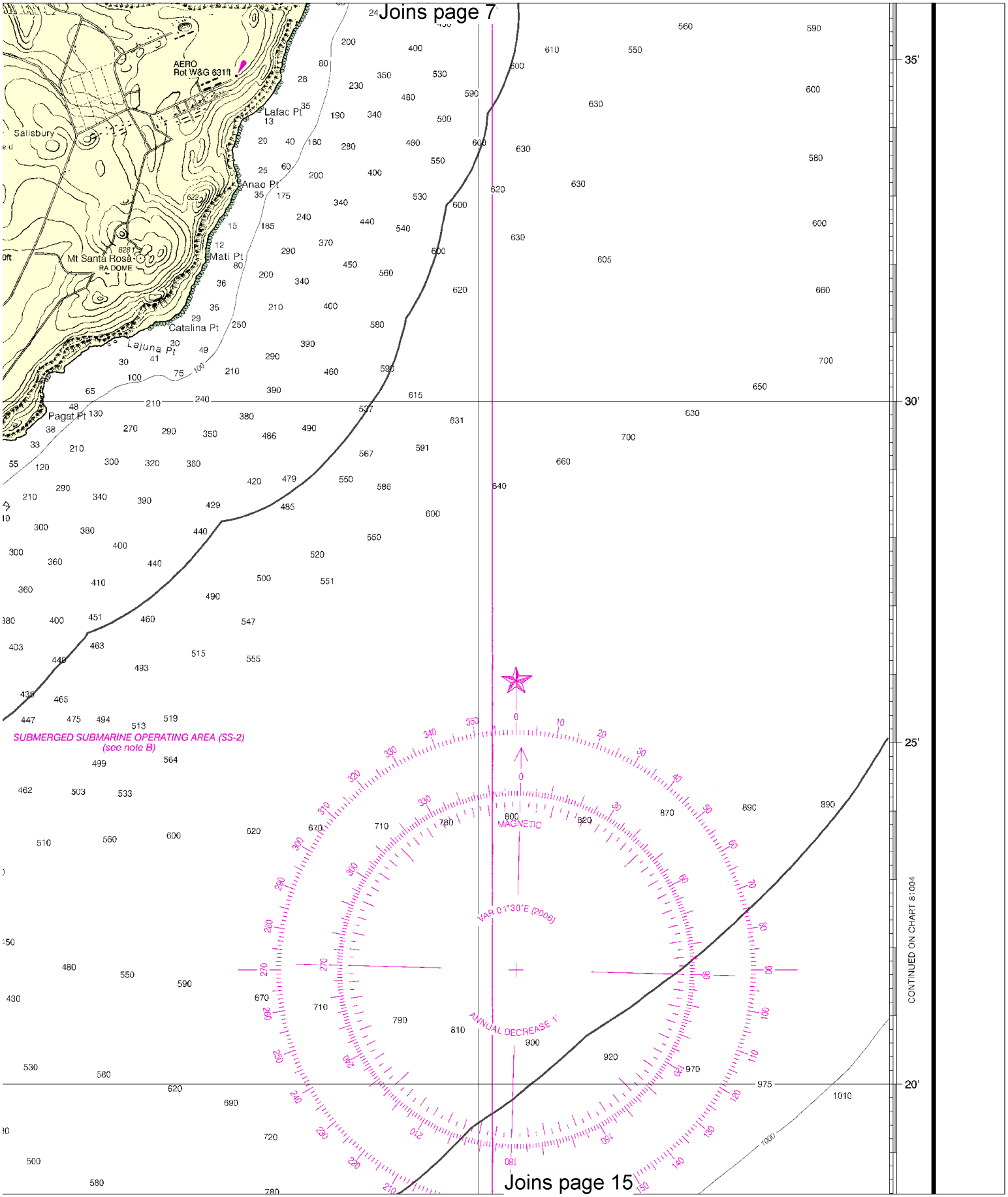
See Note on page 5.

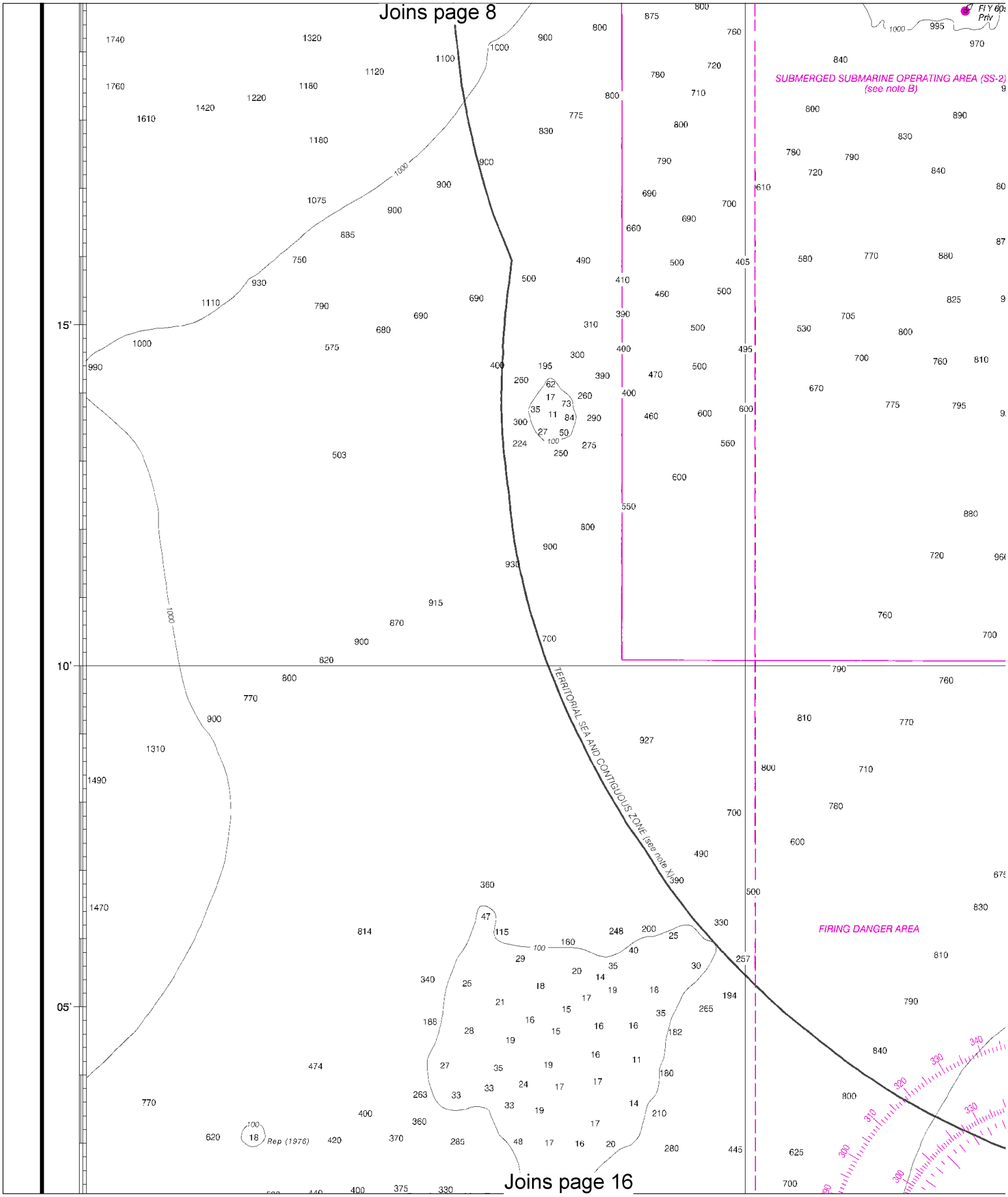
Nautical Miles

1 0 1 2 3 4 5 6 7 8 9

Yards

2000 0 2000 4000 6000 8000 10000 12000


Joins page 7
AERO
Rot W&G 631ft
Salisbury
Lafac Pt
Anao Pt
Mt Santa Rosa
RA DOME
Mati Pt
Catalina Pt
Lajuna Pt
Pagat Pt
SUBMERGED SUBMARINE OPERATING AREA (SS-2)
(see note B)
MAGNETIC
VAR 0°1'30"E (2006)
ANNUAL DECREASE 1'
35'
30'
25'
20'
CONTINUED ON CHART 8:004
Joins page 15



12

North

Printed at reduced scale. ~~SCALE 1:100,000~~

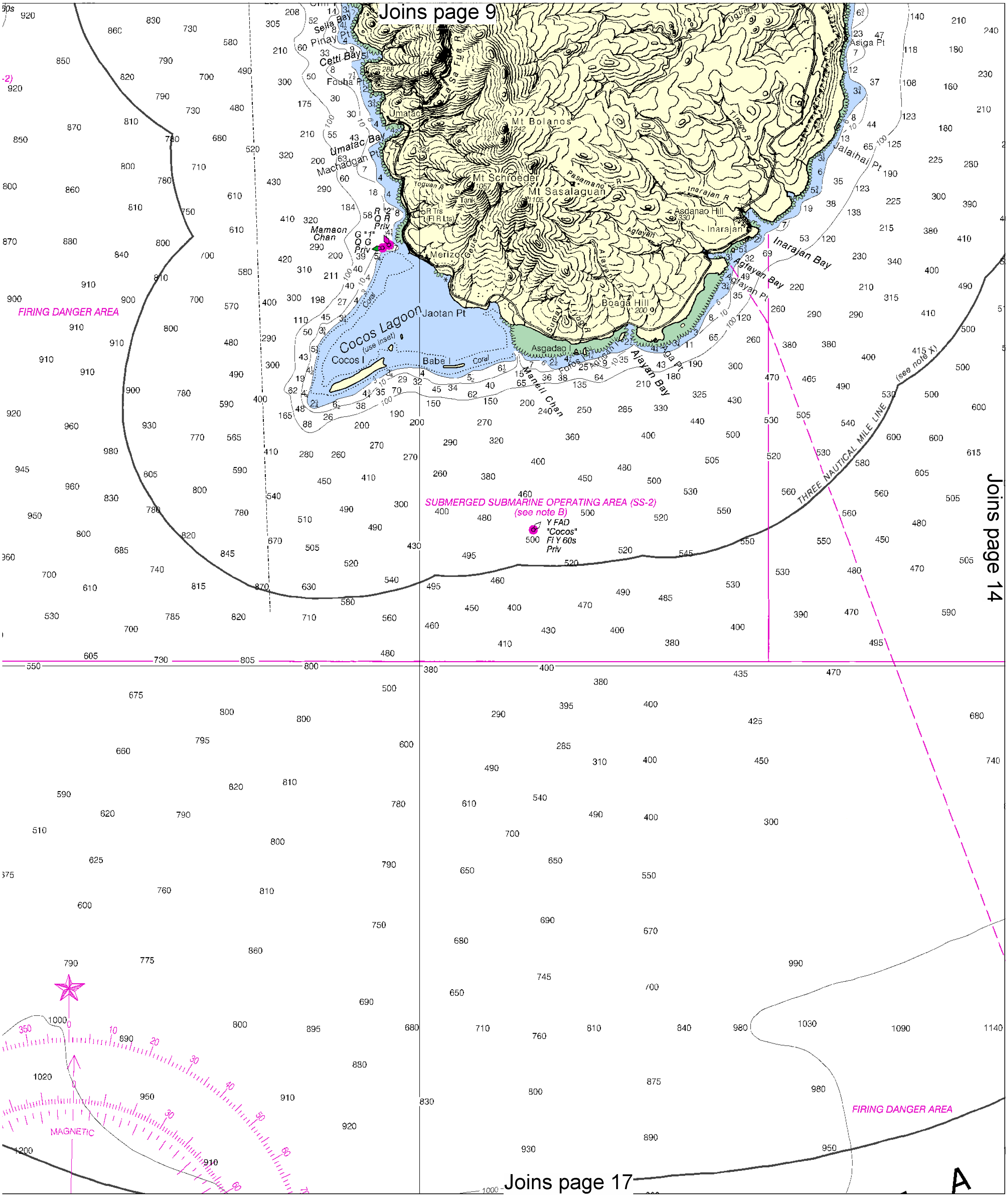
Nautical Miles

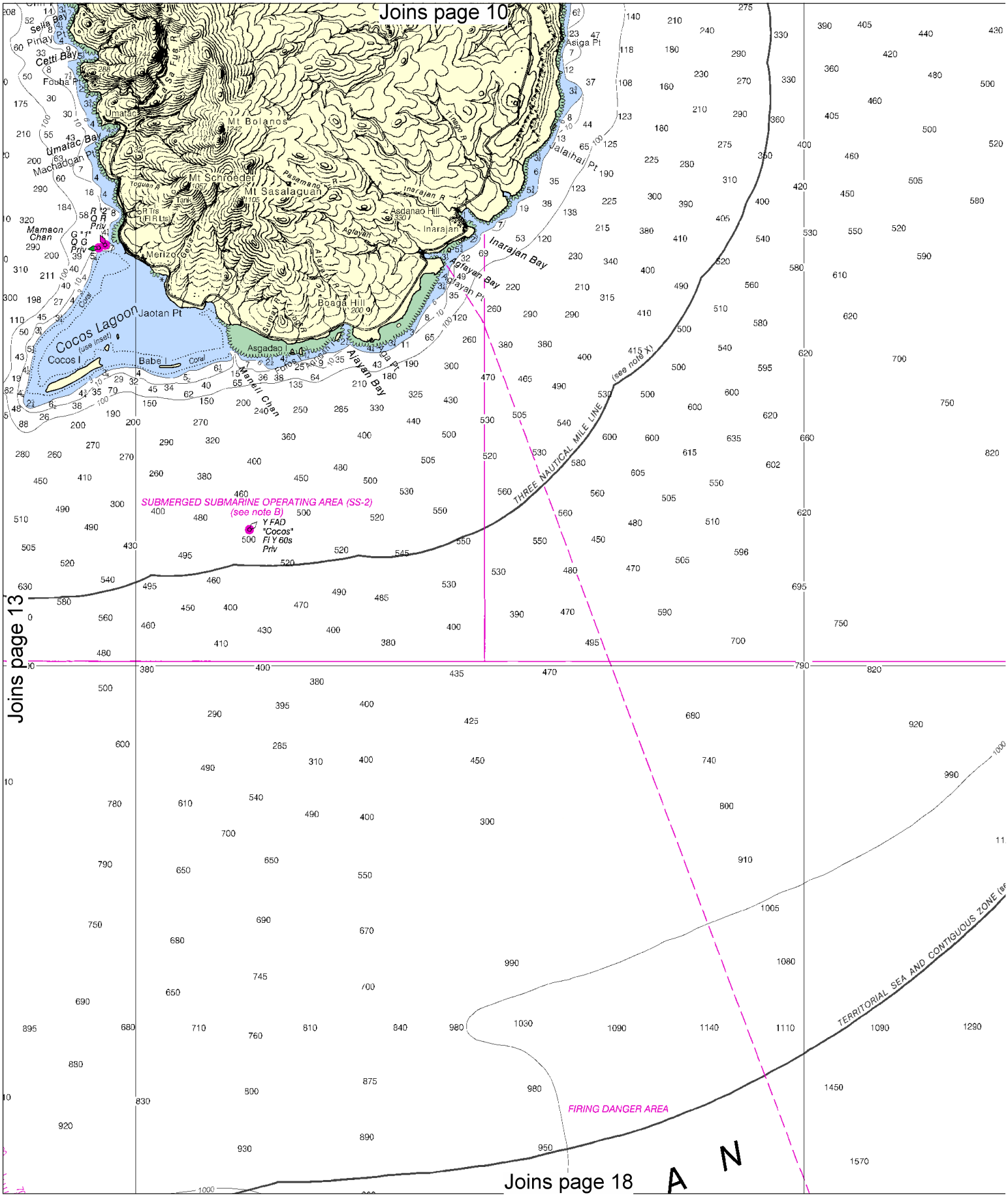
1 0 1 2 3 4 5 6 7 8 9

Yards

2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.


Joins page 9
Joins page 14
Joins page 17
Sella Bay
Pinay Pt
Cetti Bay
Fouha Pt
Umatac
Umatac Bay
Machadgan Pt
Mt Bolanos
Mt Schroeder
Mt Sasalaguan
Asdanao Hill
Inarajan
Inarajan Bay
Asiga Pt
Jalaihai Pt
Agfayan Bay
Agfayan Pt
Boaga Hill
Merizo
Mamaon Chan
Jaotan Pt
Cocos Lagoon
(use inset)
Cocos I
Babe I
Coral
Asgadao I
Manell Chan
Achang Reef
Ajayan Bay
Aga Pt
FIRING DANGER AREA
SUBMERGED SUBMARINE OPERATING AREA (SS-2)
(see note B)
Y FAD
"Cocos"
Fl Y 60s
Priv
THREE NAUTICAL MILE LINE
(see note X)
MAGNETIC
FIRING DANGER AREA
A



14

North

Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles

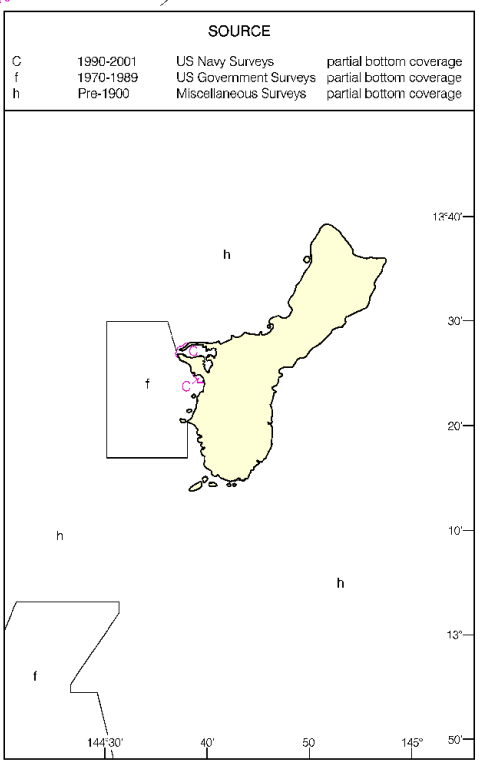
1 0 1 2 3 4 5 6 7 8 9

Yards

2000 0 2000 4000 6000 8000 10000 12000

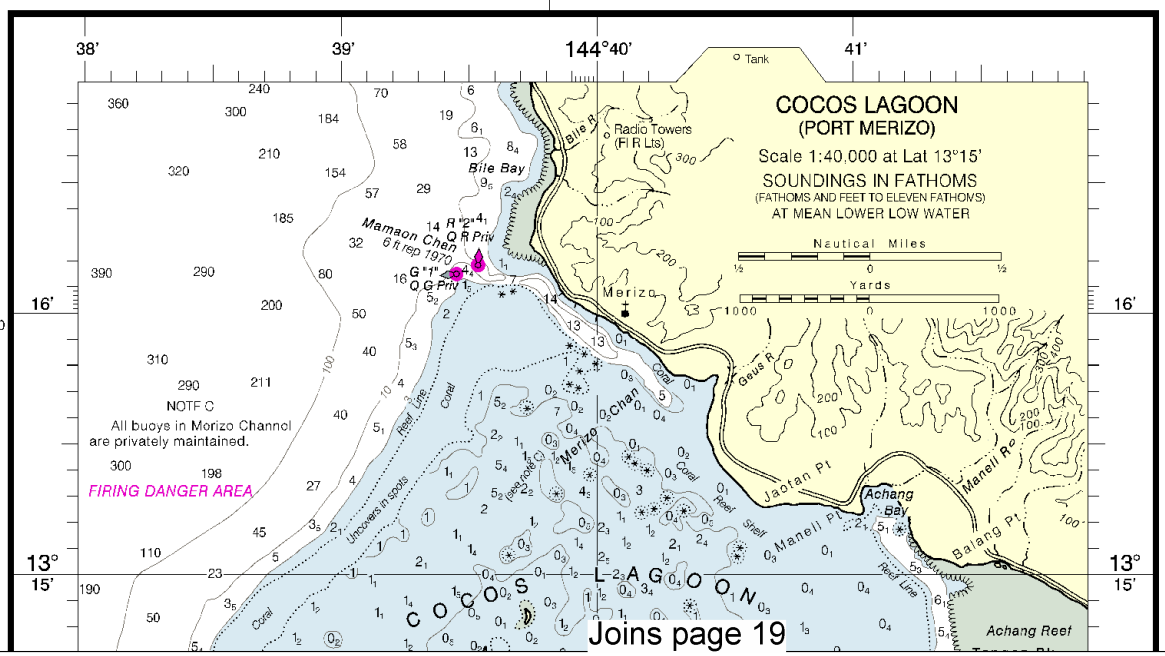
See Note on page 5.

Joins page 11

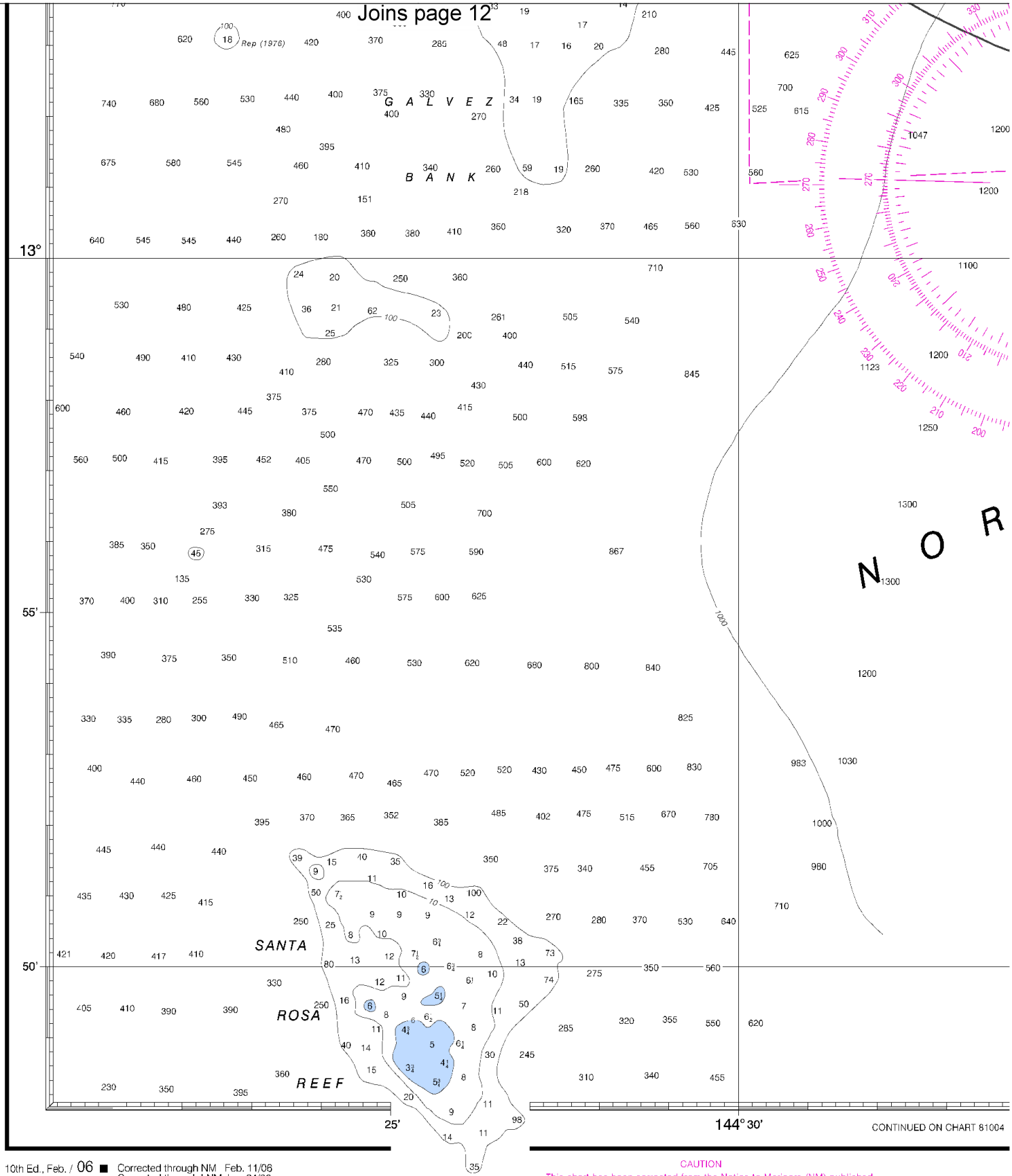


SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.



Joins page 19



10th Ed., Feb. / 06 ■ Corrected through NM Feb. 11/06
Corrected through LNM Jan. 24/06

81048

LORAN-C OVERPRINTED

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

North

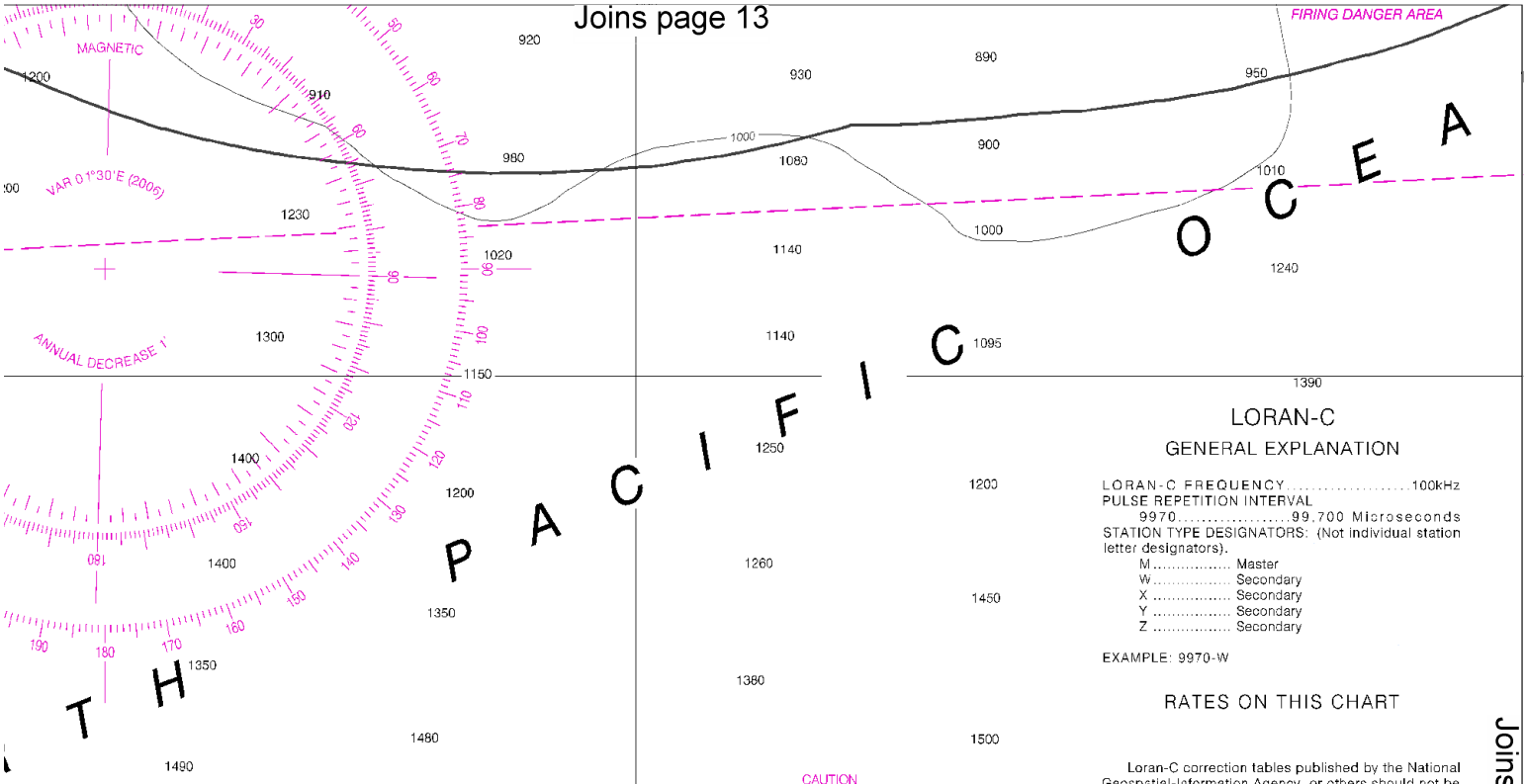
Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles: 1 0 1 2 3 4 5 6 7 8 9

Yards: 2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.

Joins page 13



LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9970.....99,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 9970-W

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Information Agency or others should not be used with his chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely soley on the lattices in inshore waters.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Guam	WXM-85	162.40 MHz

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOTE S

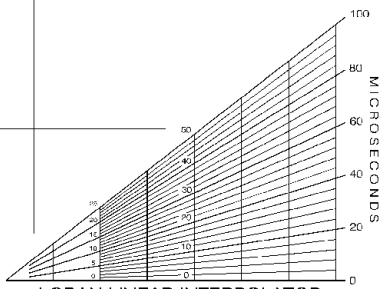
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE X

The 12 nautical mile territorial sea was established by Presidential Proclamation 5928, December 27, 1988, and is also the outer limit of the U.S. contiguous zone for the application of domestic law. The 3 nautical mile line, previously identified as the outer limit of the territorial sea, is retained because the proclamation states that it does not alter existing State or Federal law. The 9 nautical mile natural resources boundary off Texas, the Gulf coast of Florida, and Puerto Rico, and the 3 nautical mile line elsewhere remain the inner boundary of the Federal fisheries jurisdiction and limit of states' jurisdiction under the Submerged Lands Act (P.L. 83-31; 67 Stat. 29, March 22, 1953). These maritime limits are subject to modification, as represented on future charts. The lines shown on the most recent chart edition take precedence.



LORAN LINEAR INTERPOLATOR

TIDAL INFORMATION

Place Name (LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
	feet	feet	feet	feet
Apra Harbor, Guam (13°26'N / 144°39'E)	2.4	2.2	0.6	--

(Nov 2003)

Joins page 18

35' 40' 45'

SOUNDINGS IN FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

Joins page 14

Joins page 17

FIRING DANGER AREA

PACIFIC OCEAN

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9970.....99,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 9970-W

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Information Agency or others should not be used with his chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely soley on the lattices in inshore waters.

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	feet	feet	feet	feet
Apra Harbor, Guam (13°26'N / 144°39'E)	2.4	2.2	0.6	-- --

(Nov 2003)

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

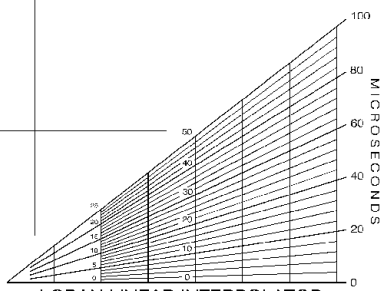
Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.



LORAN LINEAR INTERPOLATOR

40' 45' 50'

FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

FATHOMS
FEET
METERS

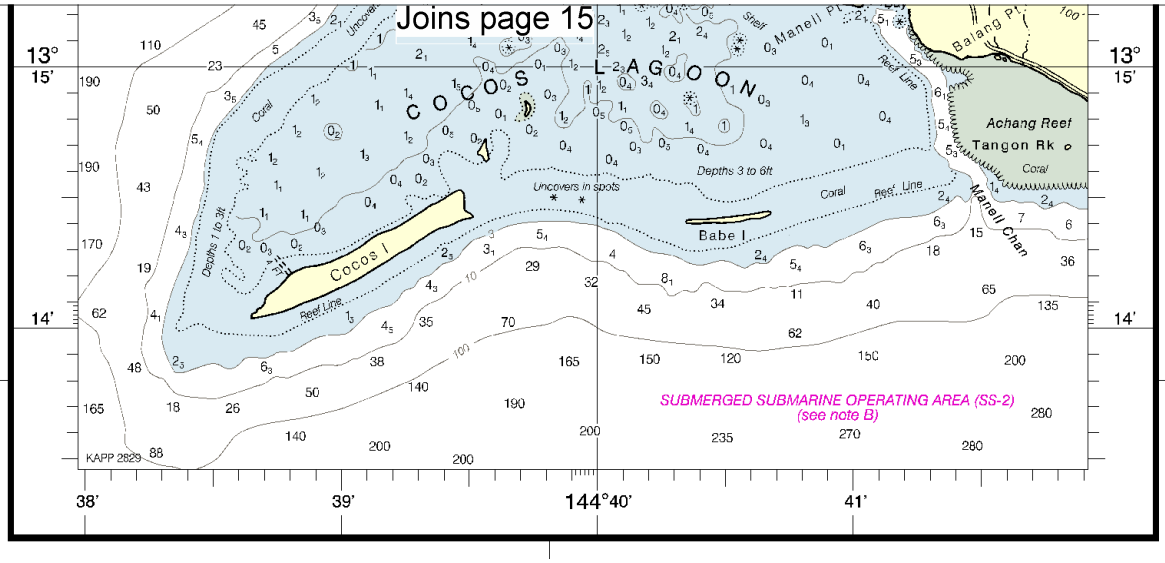
North

Printed at reduced scale. ~~SCALE 1:100,000~~

Nautical Miles: 1 0 1 2 3 4 5 6 7 8 9

Yards: 2000 0 2000 4000 6000 8000 10000 12000

See Note on page 5.



NOAA
COAST SURVEY

PACIFIC OCEAN

MARIANA ISLANDS

ISLAND OF GUAM
TERRITORY OF GUAM

Mercator Projection
Scale 1:100,000 at Lat 13°22'

World Geodetic System 1984
(North American Datum of 1983)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

For Symbols and Abbreviations see Chart No. 1

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Department of the Navy.

HEIGHTS

Elevations of rocks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

HORIZONTAL DATUM

The horizontal reference datum of this chart is World Geodetic System 1984 (WGS 84), which for charting purposes is considered equivalent to the North American Datum of 1983 (NAD 83). Geographic positions referred to the Guam 1963 Datum must be corrected an average of 5.274" northward and 8.635" eastward to agree with this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 and NGA Publication 126 for supplemental information.

NOTE A

avigation regulations are published in NGA tion 126 or weekly Notice to Mariners which include revised regulations. Information concerning the ons may be obtained at the Office of the Commander, oast Guard District in Honolulu, Hawaii or at the of the District Engineer, Corps of Engineers in lu, Hawaii.
efer to charted regulation section numbers.

NOTE B

Boundary limits of Submerged Submarine Operating Areas are shown by a solid magenta ine. As submarines may be submerged in hese areas, vessels should proceed with caution.

ACOUSTIC RANGE FACILITY

Numerous shore connected bottom cables are located within the outlined area.

CAUTION

Surface, subsurface, and aircraft operations ncluding firing exercises are conducted at arious times in areas within an approximate 20 mile radius of Guam.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light Lis: for supplemental information concerning aids to navigation.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ○(Approximate location)

WARNING

The prudent mariner will not rely so ely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List, U.S. Coast Pilot, and NGA Publication 126 for details.

Island of Guam
SOUNDINGS IN FATHOMS - SCALE 1:100,000

81048
LORAN-C OVERPRINTED

ED. NO. 10
NSN 7642014013789
NGA REFERENCE NO. 81AHA81048

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Sector Guam – (671)339-6100
Coast Guard Pacific Islands – (808)541-2500

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA, The Nation's Chartmaker

NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs™) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.